

The Role of Parental Involvement in Student Academic Success

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Abstract— The aim of this study is to investigate if lifestyle at home and parenting influence students' achievement when controlling for other factors that are also known to influence learning. Based on Epstein's framework, this study explores the influence of active parents' participation in home-based learning on children's academic skills, efficacy and performance. A cross-sectional quantitative study in which structured questionnaires were used to sample parents and teachers in some selected primary schools. The results identify a highly significant relationship between parental engagement at home and their child's success in school focusing on among other themes, discipline, completing homework, communication skills and a positive attitude to learning. The implications of the study are to recommend the ministry of education to develop and establish policies that support and promote parent involvement outside of the school. Theoretically, the research supports Epstein's model, providing further evidence that home-based parenting activities are equally important as school-based practices in ensuring the development of the whole child. The study is limited by its use of self-report and by the restricted geographical range of the sample and it suggests the need for additional research on qualitative data and for cross-cultural examination. In conclusion, this investigation confirms that the role of parental effect particularly via home learning is a fundamental and too often neglected cause of children's success in school in today's educational world.

I. INTRODUCTION

The importance of education in Malaysia is well-recognized as it goes through the decades in preparation for a 21st century education. Control is performed by the Malaysian Ministry of Education with funding coming from the state for Malaysia education system. Education is considered, from pre-school to tertiary levels as an instrument for learning as well as for the cultivation of the homosocial individual for national socio-economic development in Malaysia (Emirhafizovic et al., 2022). Consistent with Vision 2030 and other national agenda, Malaysia is seriously aiming also on next-generational assets that will serve the country, region and the world and this will be among a generation that is globally competitive, technology-savvy and having strong moral values.

Students' academic success is critical to the realization of these educational objectives. Academic achievement serves as

a significant criterion that students are learning successfully content, life skills and academics to address further academic and career challenges (Gamage et al., 2021). It is a pathway to higher education, scholarships and better job opportunities. For students to have opportunities and advantages which including gain access to renowned universities, professional development programs and international forums where academic performances matter in a competitive world of job industry in Malaysia.

The education system in Malaysia has also seen numerous structural and policy changes throughout the years as the country developed and responded to the changing global environment (Lestari et al., 2024). While the adjustments are often well-meaning, they have sometimes had unintended consequences that affect teaching and learning experiences across the nation (Gee et al., 2024). It's not exactly a new

question causing handwriting among parents, educators and policymakers that the educational system so incoherent with new curriculum and assessment modes that changes very quickly. These changes have led to confusion and uncertainty for not only students but teachers who must change their content, teaching styles and types of examination on a regular basis.

Moreover, the lack of a coherent long-term education policy has discouraged a great number of teachers who see their work undermined by ad hoc planning and political interference (Dudley, 2024). Instability causes not only students' academic performance to suffer but also their emotional well-being. The continual change presented to students through variabilities in content, expectations and assessment as well as creating undue stress and hinders the student's planning for and preparation for study. Over time, this variability can erode fundamental knowledge and skills and impact their college and career readiness.

An escalating issue is also the urban-rural divide in the standard of education. Even in cities, the schools have better resources and can afford new materials, good teachers and online resources but in rural cities, things become tough as the infrastructure is poor plus inadequate support (Rawal, 2024). This disparity exacerbates the difficulty of keeping up with frequent changes in curriculum in public education with rural educators being less likely to have access to timely staff development and materials to address new initiatives. Students in poorer areas are thus at a greater disadvantage and the achievement gap across the nation is widened.

The system of education in Malaysia has grown and changed over the years from a colonial system to a national and comprehensive system with emphasis on fair, affordability and competitiveness (Bernardlauwers et al., 2024). In the first few decades following independence, the priority was to increase access to primary education especially in rural and other lagging regions. National Education Policy and Malaysia Plans also resolved to formalise and integrate education in the country through public schools, vocational colleges and universities were set up to cater for the increasing needs (Ong, 2025). Reforms have been increasingly directed towards enhancement of literacy and access and alignment of the education system with international standards with specific focus on STEM, Digitally Literacy and 21st Century skills (Ismail et al., 2024).

Malaysian schools have evolved over the years in order to match industry standards as well as to prepare students to work in the real world. Schooling in the beginning stressed on cramming for exams and there was hardly anything done for developing soft skills or for real life (Mukhalalati et al., 2024). However, with Malaysia's economy moving to a more knowledge-based and digital-driven economy, there's an

increasing realization that academic success alone isn't going to make the cut. Schools took to embedding skills such as critical thinking, problem solving, creativity and communication into curriculum through initiatives such as the 21st Century Learning and the Malaysia Education Blueprint 2013–2025 (Janius et al., 2024).

While many parents have the knowledge of what an average contribution may entail making them familiar with homework help, attendance at school events and meetings and teacher communication for others this field remains terra incognita (DeBaryshe, 2023). The main reasons include socioeconomic differences such as parental education and access to information. Thus, relatively well-educated parents know and appreciate the importance of academic involvement, and underprivileged families are likely to lag behind (Bhandari & Timsina, 2024). Another major gap is the absence of support from schools, indicating the efficiency of parental participation efforts. Some schools implement strategies aimed at informing and engaging parents while others avoid creating channels for meaningful communication. The end result is a gap while some children benefit from a college environment, others are not prepared or cannot get this support. Moreover, language barriers, cultural differences and rigid systems limit the efficacy of that interaction. With the development of telecommunication, the expectations regarding parents shifted to consuming digital learning at home as well (Misirli & Ergulec, 2021). However, not every parent is tech-savvy especially during uncertain periods such as the COVID-19 lockdown. All these gaps exacerbate existing problems and render many parents unable to meet modern expectations.

Epstein's model based on Six Types of Involvement includes parenting, communicating, volunteering, learning at home, decision making and collaborating with the community was intended to provide a comprehensive understanding of possible ways in which families can be involved in a child's education (Li et al., 2024). More importantly, Epstein consistently argued that families cannot fulfil their educational role in isolation from schools and effective education could not be achieved without a functioning partnership between the two parties. Throughout the years, Epstein's model continued to change and develop which made it capable of remaining relevant across different generations with their unique customs, practices and social circumstances (Jurkova & Guo, 2021).

These complexities identified in this study unveiled the need for further examination into how variations in parenting, communication and learning at home affect student academic success across socio-economic and generational contexts. A key reason for this lack of specifying the relevant moderation contexts are relationships in the context of educational outcomes between parents and teachers and parents and

children without a comprehensive understanding of this interrelationship. Many efforts to improve educational outcomes through increasing parental involvement may be inadequate especially in underrepresented or disadvantaged communities. This study aims to fill this void by exploring the influence of these three core roles anchored in Epstein's model on students' academic performance as well as the mediating role of family background and generational differences in the quality and impact of parental involvement.

Objectives

The primary objectives of this study are:

To analyze on the relationship between parenting influence against the academic success of student's academic success.

To analyze on the relationship between parent-teacher communication against the academic success of student's academic success.

To analyze on the relationship between learning at home against the academic success of student's academic success.

foundation in which it shares the dilemma of how the roles of parental involvement in their children's academic success is crucial. With this being mentioned, the researcher's focus is placed onto learning the role of parental involvements and how it influences the academic success of their children. This could be from the perspective of the socio-economic balance as well as in general of how parents could involve themselves in their children's education.

II. METHODOLOGY

Research Design

A quantitative cross-sectional survey technique was employed in this study to explore the significance of parental involvement to student academic achievement. Quantitative method is suitable for this study since it allows to gather numerical data and analyze to test the connections between specified variables which are parenting influence, parent-teacher communication and learning at home as independent variables and student academic success as a dependent variable. Using structured questionnaires, the research generates standardized answers to be statistically explored to discover tendencies, associations and the strong inter-relationships between variables (Tao et al., 2022). A cross-sectional design enables the researcher to capture data at a single time point which can provide a snapshot of parental involvement and its impact on students' academic achievement between homes and levels of education.

Population and Sample

This study looks to employ a stratified random sampling technique to select participants from the target population that comprises of parents from both primary and secondary

school students. Stratified sampling is chosen due to the samples that accurately representing various different subgroups within a subset of the population demographically. The demography looks into the school levels, parental education level and also the geographical location. The sample size of the study is determined based on the total pre-determined population of the parents with children enrolled in primary or secondary schools. Based on the population of the study, the statistical validity and generalization for the findings suggests responses of 384 respondents.

III. DATA COLLECTION METHODS

Quantitative Data Collection: The questionnaire will be comprised of close-ended questions assessed on a Likert scale that is able to measure in a quantifiable way participants' attitude, behavior and perception. This facilitates consistency, reliability and comparability of response at a larger sample size. The survey will be administered to a sample from parents to provide information on the various aspects of parental involvement in the context of Epstein's framework. In addition as a cross-sectional study, the researcher could discriminate among demographic groups such as parental education, income or age without engaging in long-term data collection of participants.

Data Analysis

Quantitative Data Analysis: The employed investigation method was largely quantitative structured to analyze the extent to which a variety of types of parental involvement including parenting influence, parent-teacher communication and learning at home contributed to student academic success, through the use of various statistical methods. The statistical tool for data analysis was descriptive and inferential statistics especially correlation and regression analyses. Descriptive statistics were employed to summarize and describe the data set such as frequencies, means and standard deviations to provide a further insight into the general trend of the variables. On the contrary, inferential statistics were indispensable in answering the question if the associations found among variables could be believed to be statistically significant and applicable in population beyond the samples.

IV. RESULTS

Descriptive statistics

The descriptive statistics indicate the strong support of renewable energy development by respondents. The average score of adoption intention is 4.27 suggesting high degree of willingness to adopt renewable technologies with

negatively skewed and leptokurtic distribution which means strong level of agreement. Attitude of renewable energy has also largest difference on mean (4.42) with small SD meaning that perceptions toward usefulness and safety of renewables devices are commonly positive. The subjective norms exhibits the lowest average (3.84) and the largest dispersion indicating that there is mixed influence in society regarding adoption. Perceived behavioural control ($M = 4.19$) suggests that the majority of respondents believe that they would be able to use renewable energy, but there are few obstacles for some others. Finally, a high level of consensus is reached when it comes to perceived relative advantage (mean = 4.29) in which renewables are believed to offer long-term benefits that outweigh those of traditional sources. Thus, in a general way it can be said that positive attitudes, perceived advantages and self-efficacy determine more the adoption of the technology when compared to social expectations. Overall, the data suggest a stronger influence on acceptance by positive attitudes rather than social pressures continued education and support are required for wide-scale adoption.

Linear Regression Analysis

The model summary table gives some of the important metrics to assess the regression model with. The multiple correlation coefficient for this model is 0.883 ($R = .883$), representing a very strong positive relationship between the independent variables with student academic success. The R Square value (0.780) indicates that the three predictors

account for 78% of the variance in student academic success. The Adjusted R Square (0.778) that adjusts R Square value based on predictors and sample size also provides evidence of the model being robust. The Standard Error of the Estimate is an estimate of the amount by which the actual observations deviate from the value predicted by the model. Finally, concerning autocorrelation, the Durbin-Watson test statistic (2.673) falls in the accepted range of values between 1.5 and 2.5 (independence) as it is close to 2.5 there is potential mild positive autocorrelation but this is something that could merit further investigation.

ANOVA (Analysis of Variance) table tests the overall significance of the regression model. For F-statistic (449.614) its significance value was (p values = 0.000) indicate that the model fits significantly better than an empty model suggesting that the predictors together are good predictors of student academic success. The proportion of variance in the outcome variable accounted for by the predictor variable model is the ratio of the explained variance in the regression model (Regression Sum of Squares = 181.465) and the unexplained variance of the null model (Residual Sum of Squares = 51.123) together with the explained variance in the regression model (Regression Sum of Squares = $(181.465 + 35.151) / 232.587$; 78% and 82% respectively for frogs and toads). A large F-value and a small p-value indicate that the overall model fits the data well.

Table 1. Descriptive Statistics.

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Adoption of Renewable Energy	300	1.80	5.00	4.2753	.70226	-1.657	.141	3.367	.281
Attitude	300	1.60	5.00	4.4227	.62352	-2.495	.141	8.372	.281
Subjective Norms	300	1.00	5.00	3.8433	1.09428	-1.117	.141	.235	.281
Perceived Behavioral Control	300	1.60	5.00	4.1853	.84223	-1.395	.141	1.531	.281
Perceived Relative Advantage	300	1.40	5.00	4.2933	.71605	-2.186	.141	6.104	.281

The table of coefficients gives a detailed understanding of the contribution of each independent variable to predict the dependent variable. The constant (intercept) is 0.735 that means if all independent variables are zero where the baseline predicted value of academic success would be 0.735. Of the predictors, Parenting Influence plays the most important role in predicting academic success, it alone has got a standardized beta of 0.790 and p-value is highly significant (0.000). This indicates that the more committed

and encouraging the parents, the greater the scholastic achievement of the child. Notably, Parent-Teacher Communication has a negative beta weight (-0.045) and is also insignificant ($p = 0.090$). Learning-at-Home contributes positively and significantly contact learning is clearly learning which was conducted through face to face on classroom or school 0.000 but the influence is more modest than that of Parenting Influence.

Table 2. Linear Regression Analysis.

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	
1	.883 ^a	.780	.778	.36679	2.673	

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	181.465	3	60.488	449.614	.000
	Residual	51.123	380	.135		
	Total	232.587	383			

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.735	.099		7.410	.000
	Parenting Influence	.718	.034	.790	20.818	.000
	Parent Teacher Communication	-.029	.017	-.045	-1.700	.090
	Learning At Home	.112	.029	.142	3.855	.000

Pearson Correlation Coefficient

The r between these is $r = 0.878$ which is a very strong positive association. This indicating that the more positively involved and supportive the parenting styles applied, the better students tend to fare academically. This association is also statistically significant ($p = 0.000$) between vector and pattern a strong correlation is a reliable correlation. The results revealed a significant and very strong positive relationship between level of parenting influence and student academic achievement ($r = 0.878$). This is to say that when parents are more engaged in their child's academic life by making sure they go to school have the necessary supplies and emphasize the importance of an education, they usually see their children perform better academically. This trend was also evident in the regression such that parenting influence had the highest and significant

beta ($\beta = .790$, $p < .001$). This validates that parenting influence is a critical factor predicting educational attainment in this model.

Learning at Home has a strong association with Student Academic Success ($r = 0.722$, $p = 0.000$). This result emphasizes the reframing of learning activities that take place in the home helping with homework, engaging in educational conversations and coaching for persistence have a considerable positive influence on student academic achievement. That's a clear indication of the role of parents in academics not just in terms of discipline or values but also in daily academic support. Learning at home was found to correlate highly with academic achievement ($r = .722$) which means that the more engaged parents are in learning by helping with homework or stressing the importance of effort, the better students perform in school. This variable

likewise had a significant and positive impact in the regression ($\beta = 0.142$, $p < 0.001$), further suggesting that homeschooling per se independently improves student achievement, regardless of other covariates.

By contrast, Student Academic Success is moderately positive correlated with Parent-Teacher Communication ($r = 0.339$). Although this is a small effect size compared to the two other predictors, a meaningful correlation is nonetheless observed that is statistically significant ($p = 0.000$). This may be an indication that while parent-teacher communication supports academic achievement, it is not as

strong a contributor to it as other behaviors like active parenting or at-home learning participation.

Considering the inter-correlations between the independent variables, Parenting Influence and Learning at Home are significantly correlated ($p = 0.755$, $p = 0.000$) suggesting that effective parenting is often accompanied by parents supporting learning at home. On the other hand, Parenting Influence and Parent-Teacher Communication exhibit moderate positive relationship ($r = 0.422$) and Parent-Teacher Communication and Learning at Home are also moderately associated ($r = 0.355$).

Table 3. Pearson Correlation Coefficient.

Correlations		Student Academic Success	Parenting Influence	Parent Teacher Communication	Learning At Home
Student Academic Success	Pearson Correlation	1	.878**	.339**	.722**
	Sig. (2-tailed)		.000	.000	.000
	N	384	384	384	384
Parenting Influence	Pearson Correlation	.878**	1	.422**	.755**
	Sig. (2-tailed)	.000		.000	.000
	N	384	384	384	384
Parent-Teacher Communication	Pearson Correlation	.339**	.422**	1	.355**
	Sig. (2-tailed)	.000	.000		.000
	N	384	384	384	384
Learning At Home	Pearson Correlation	.722**	.755**	.355**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	384	384	384	384

V. DISCUSSION

Parenting influence, parent-teacher communication and learning at home are major factors that have contributed significantly to student academic success. Through the Epstein's framework of parental involvement, parenting influence has been analyzed as a key factor shaping children's academic growth, their study habits, attitudes and motivation. The authors of the book identified parent-teacher communication as another key determinant. Melding formal and informal channels with the teachers in a child's school not only provide both sides mutual assistance in nurturing students' achievement, it also meet individual needs for children.

Theoretical Implications

A central theoretical contribution of this paper is the empirical verification of Epstein's six types of involvement

and more specifically, the three dimensions selected for this paper. The strong relationship observed between these factors and students' academic success only adds to the model's strength and applicability when used in different cultural and geographical settings. This corroborates the idea that parent participation although often perceived as a pragmatic issue or policy-driven concern might also be grounded on social and educational theory that is subject to quantitative measurement and analysis. By providing such clear examples of how theoretical concepts are made manifest in educational activities related to real students, the findings of this study further bridge the gap between theory and practice rendering Epstein's framework applicable to scholars and educational professionals worldwide.

Limitations and Future Directions

The main limitation of this study is that the study design

was cross-sectional. The data collection was cross-sectional limiting the ability to infer causality between the independent factors (parenting influence, parent–teacher communication, learning at home) and the dependent factor (student academic success). Though the analysis does indicate strong correlations, it can't prove one way or the other whether parental involvement causes better academic attainment or whether students who succeed can attract more of their parents' time and attention. It would be interesting for future research to take a longitudinal perspective to better understand how these relationships change over time.

There are some limitations to the study and future researchers should consider a longitudinal design to follow parental involvement and its effects on student academic achievement across time. A cross-sectional design can identify associations at one time but cannot explain how the role of parent's changes through early life or in relation to familial and school settings. Longitudinal data would permit consideration of causality to be conducted more rigorously enabling us to provide more robust evidence on the effect of the continuity, change or increase in parental involvement on long-term academic development.

Practical Implications

The MOE can use this information to frame national guidelines for parental involvement similar to teaching standards. Such guidelines might offer schools formal avenues for including parents in their children's learning beyond the occasional meetings on discipline or passing out report cards but through regular outreach, academic involvement programs and family learning activities. Adoption of a formal parental involvement guide patterned after Epstein would bring the value of consistency and uniformity in how schools are working with their families regardless of location and socio-economic status.

From the school's point of view, the study underscores the need to build a culture of partnership. Schools need to make a conscious effort in changing the way they see parents from being external stakeholders to being part of the teaching and learning process. That means more than parent-teacher conferences it means establishing continuous and inclusive lines of communication that build trust, shared decision-making, and a sense of shared responsibility that transcends boundaries. Schools need to develop explicit structures and plans for parent participation using the Epstein framework, parent-teacher communication, volunteering, learning, advising, and collaborating. By making these practices institutional, schools can help it become second nature for every parent regardless of their own background to feel welcome and capable of partnering in their children's education.

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